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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/272,542	03/19/99	MADOFF	P 10575/002001

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EXAMINER

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ART UNIT	PAPER NUMBER
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2761

DATE MAILED:

06/23/00

*(Handwritten number 6)*

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/272,542

Applicant(s)

Madoff et al.

Examiner

Tongoc Tran

Group Art Unit

2761

☒ Responsive to communication(s) filed on Mar 19, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-64 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-64 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Information Disclosure Statement*

1. The Information Disclosure Statement filed on 6/30/1999 has been reviewed and considered.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a **patent** unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4-20, 22, 24-41, 43-49, 51-55, 57-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Wagner (U.S. Patent No. 4,903,201).

Regarding to claim 1, Wagner discloses a method of auctioning products, said method executed over a distributed networked computer system, said method comprising:

entering an order for a product, the order specifying a price which can be a relative price, a market price or a fixed price, and specifying a quantity and an exposure time (see Fig. 5, item 148, col. 10, lines 19-22 and col. 16, lines 44-51).

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entering a response to an order, the response specifying a price, which can be a relative, fixed price or a relative price with a price improvement, and quantity (see Fig. 5, item 148, col. 10, lines 19-22); and

matching the order with the response in accordance with the exposure time specified by the order (see Fig. 5, items 144, col. 5, lines 43-46 and col. 16, lines 44-51).

Regarding to claim 2, Wagner discloses the method of claim 1 wherein a plurality of orders and response are entered, and wherein matching further comprises:

matching a first one of the orders with responses during the exposure time interval specified by the order (see col. 5, lines 43-46).

Regarding to claim 4, Wagner discloses the method of claim 1 wherein the products are financial instruments (see col. 1, lines 1-2).

Regarding to claim 5, Wagner discloses the method of claim 1 wherein matching retrieves an oldest response and determines whether the oldest response includes a price that satisfies a price specified by the order (see Fig. 144 and 148, col. 5, lines 43-46 and col. 16, lines 44-51).

Regarding to claim 6, Wagner discloses the method of claim 1 further comprising:  
expiring the order if the exposure time specified by the order has elapsed and no matching responses was received (see col. 16, lines 44-51, expiring the order that attached with time condition is inherently required after the time elapsed, therefore the limitation is met).

Regarding to claim 7, Wagner discloses the method of claim 1 further comprising:

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entering pre-defined relative indications that correspond to a willingness to buy or sell the product; and wherein the pre-defined relative indications specify a price relative to a current market price (see Fig. 8, item 240, col. 12, lines 45-49).

Regarding to claim 8, Wagner discloses the method of claim 7 wherein the pre-defined relative indications specify a quantity of the product (see col. 10, line 21-22).

Regarding to claim 9, Wagner discloses the method of claim 1 wherein entering orders further comprises:

specifying a product (see col. 10, line 22).

Regarding to claim 10, Wagner discloses the method of claim 1 wherein entering responses further comprises:

specifying a product (see col. 10, line 22).

Regarding to claim 11, the claimed invention is similar to claim 5 and therefore the same rejection applied.

Regarding to claim 12, Wagner discloses the method of claim 7 wherein retrieving further comprising:

matching pre-defined relative indications to the order with the pre-defined relative indications ranked by price and within a price ranking by time (see col. 3, lines 45-46).

Regarding to claim 13, the claimed invention is similar to claim 6 and therefore the same rejection applied.

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Regarding to claim 14, Wagner discloses a method of auctioning financial products over a distributed, networked computer system, said method comprising:

entering orders for financial products into the distributed, networked computer system, said orders specifying a price for the financial product (see col. 7, lines 12-17, col. 12, lines 61-65), a quantity of the financial product and exposure time which the order can remain active (see Fig. 5, item 148, col. 10, lines 19-22 and col. 16, lines 44-51);

entering responses to orders for the product, said responses specifying a price and quantity; and for a first one of said order (see Fig. 5, item 148, col. 10, lines 19-22),

matching said first order, to the responses and contra-side order, during an interval determined by the exposure time specified by said first order (see Fig. 5, item 144, col. 5, lines 43-46); and

expiring the first one of the orders if no matching responses or contra-side orders are received during the exposure period (see col. 16, lines 44-51, expiring order is inherently required when limit time condition is attached to the order, therefore the limitation is met).

Regarding to claim 15, Wagner discloses the method of claim 14 further comprising:

executing a trade between the first order and one of the contra-side orders or responses that matched the first order (see col. 5, lines 43-45).

Regarding to claim 16, Wagner discloses the method of claim 15 wherein executing a trade further comprises:

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reporting the first order and the matched one of the contra-side orders or response to a facility of a self-regulatory organization for market validation (see col. 12, lines 53-58, the limitation is met because the reporting step of first order and the matched responses to a facility of a self regulatory organization for market validation must exist in order for execution to be carried out).

Regarding to claim 17, Wagner discloses the method of claim 14 wherein the orders can further include conditions attached to the order (see col. 13, lines 43-47).

Regarding to claim 18, Wagner discloses the method of claim 17 wherein the conditions can include a price improvement (see col. 13, lines 43-47).

Regarding to claim 19, the claimed invention is similar to claim 7 step 1 and therefore the same rejection applied.

Regarding to claim 20, the claimed invention is similar to claim 7 step 1 and therefore the same rejection applied.

Regarding to claim 22, Wagner discloses the method of claim 14 wherein for trading by a broker dealer, the system allows the broker/dealer to specify specific trading options when the broker dealer is trading with its own customer (see col. 10, lines 16-28, col. 13, lines 43-47).

Regarding to claim 24, Wagner discloses a computer program product for auctioning products, said computer program product residing on a computer readable medium comprising instructions for causing a computer to:

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receive an order that was entered for a product, the order specifying price, quantity and exposure time (see Fig. 5, item 148, col. 5, lines 38-43);

receive a response that was entered in response to an order, the response specifying a price, price improvement, and quantity (see Fig. 5, item 144, col. 5, lines 43-46); and

match the order with the response during the exposure time specified by the order (see Fig. 5, item 144, col. 5, 43-46).

Regarding to claim 25, the claimed invention is similar to claim 4 in broader scope and therefore the same rejection applied.

Regarding to claim 26, the claimed invention is similar to claim 5 and therefore the same rejection applied.

Regarding to claim 27, the claim invention is similar to claim 6 and therefore the same rejection applied.

Regarding to claim 28, the claimed invention is similar to claim 7 and therefore the same rejection applied.

Regarding to claim 29, the claimed invention is similar to claim 8 and therefore the same rejection applied.

Regarding to claim 30, the claimed invention is similar to claim 9 and therefore the same rejection applied.

Regarding to claim 31, the claimed invention is similar to claim 10 and therefore the same rejection applied.



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Regarding to claim 32, the claimed invention is similar to claim 11 and therefore the same rejection applied.

Regarding to claim 23, Wagner discloses a system for auctioning financial products over a distributed networked computer system, said system comprising:

a plurality of workstations for entering orders for financial products into the distributed, networked computer system (see col. 7, lines 12-17), said orders specifying a price for the financial product, a quantity of the financial product and exposure time which the order can remained active (see Fig. 5, item 148, col. 10, lines 16-22, col 13, line 45);

a plurality of workstations for entering responses to orders for the product, said responses specifying a price and quantity (see Fig. 5, item 148, col. 10, lines 16-22);

a server computer coupled to the workstations for entering the orders and the responses (see col. 7, lines 12-14), said server computer executing a server process that for a first one of said orders (see col. 5, lines 38-46, central processor-"server", remote terminals-"client"),

determines a match to said first order with the responses and contra-side orders during an interval determined by the exposure time specified by said first order (see col. 10, lines 20-26, col. 13, line 45).

Regarding to claim 34, the claimed invention is similar to claim 15 and therefore the same rejection applied.

Regarding to claim 35, the claimed invention is similar to claim 16 and therefore the same rejection applied.

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Regarding to claim 36, the claimed invention is similar to claim 17 and therefore the same rejection applied.

Regarding to claim 37, the claimed invention is similar to claim 18 and therefore the same rejection applied.

Regarding to claim 38, the claimed invention is similar to claim 7, step 1 and therefore the same rejection applied.

Regarding to claim 39, the claimed invention is similar to claim 7, step 1 and therefore the same rejection applied.

Regarding to claim 40, Wagner discloses a system for auctioning financial products over a distributed, networked computer system comprises:

a plurality of workstations for entering orders for financial products into the distributed, networked computer system (see col. 7, lines 12-14), the orders specify a price for the financial product, a quantity of the financial product and exposure time which the order can remain active (see Fig. 5, item 148, col. 10, lines 16-22, col. 13, line 45);

a plurality of workstations for entering predefined relative indications (see col. 7, lines 12-14) and responses to order for product, the predefined relative indications specifying a willingness to trade (see col. 12, lines 45-49), the response specifying a price and quantity (see col. 10, lines 19-22); and

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a server computer coupled to the workstations for entering the orders (see col. 7, lines 12-14), predefined relative indications, and the responses, with the server computer executing a server process (see col. 12, lines 45-49), said server process comprising software to:

determine a match to a first order with the predefined relative indications, responses and contra-side orders (see col. 5, lines 43-45, col. 12, lines 45-49, col. 10, lines 20-26) during an interval determined by the exposure time specified by said first order (see col. 13, line 45, time condition order)

Regarding to claim 41, Wagner discloses a method of auctioning a product, said method comprising:

entering a predefined relative indication that corresponds to a willingness to buy or sell the product with the pre-defined relative indication specifying a price relative to a current market price (see Fig. 5, item 148, col. 12, lines 45-49).

Regarding to claim 43, Wagner discloses the method of claim 41 wherein said method is executed over a distributed networked computer system (see col. 7, lines 12-17, central processor -"server", remote terminals-"clients", col. 12, lines 61-65).

Regarding to claim 44, the claimed invention is similar to claim 1 step 1 and therefore the same rejection applied.

Regarding to claim 45, the claimed invention is similar to claim 12 and therefore the same rejection applied.

Regarding to claim 46, Wagner discloses the method of claim 43 further comprising:

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matching the order with the predefined relative indication in accordance with the exposure time specified by the order and in accordance with a time of receipt of the predefined relative indication (see col. 3, lines 45-46, lines 13, line 45).

Regarding to claim 47, the claimed invention is similar to claim 1 step 3 and therefore the same rejection applied.

Regarding to claim 48, the claimed invention is similar to claim 1 and claim 18, therefore the same rejection applied.

Regarding to claim 49, the claimed invention is similar to claim 2 and therefore the same rejection applied.

Regarding to claim 51, the claimed invention is similar to claim 4 and therefore the same rejection applied.

Regarding to claim 52, the claimed invention is similar to claim 8 and therefore the same rejection applied.

Regarding to claim 53, the claimed invention is similar to claim 12 and therefore the same rejection applied.

Regarding to claim 54, the claimed invention is similar to claim 12 and therefore the same rejection applied.

Regarding to claim 55, Wagner discloses a method of auctioning securities comprises:

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entering an order for security, the order specifying a condition that seeks a specific minimum relative price improvement and an exposure time (see col.13, lines 44-45, col. 16, lines 44-51);

entering a response to the order, the response specifying a price which can be a relative or fixed price or a contra-side order that may have a condition seeking a relative price improvement, and quantity (see col. 10, lines 19-22, col. 13, line 44); and

matching the order with the response in accordance with the exposure time specified by the order (see Fig. 5, item 144, col. 13, line 45).

Regarding to claim 57, Wagner discloses the method of claim 55 wherein the order with the condition specified the price improvement relative to the national best bid/offer (NBBO) (see col. 10, lines 19-26, col. 13, line 44, SEC requires brokers guarantee customers the best available bid/offer price when they buy/sell securities, therefore the limitation is met).

Regarding to claim 58, Wagner discloses the method of claim 55 wherein the order can include other conditions including executing all of the order or none of the order (see col. 13, line 44).

Regarding to claim 59, Wagner discloses a computer program product residing on a computer readable medium for auctioning a product, comprising instructions for causing a computer:

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store a pre-defined relative indication that corresponds to a willingness to buy or sell the product with the pre-defined relative indication specifying a price relative to a current market price (see col. 10, lines 19-22, col. 12, lines 45-49);

receive an order for a product, the order specifying a price which can be a relative price, a market price or a fixed price, and specifying a quantity (see Fig. 5, item 148, col. 10, lines 19-22); and

match the order with the predefined relative indication in according with a price specified by the order (see Fig. 5, item 144, 148, col. 10, lines 47-52).

Regarding to claim 60, the claimed limitation is similar to claim 46 and therefore the same rejection applied.

Regarding to claim 61, the claimed invention is similar to claim 42 and therefore the same rejection applied.

Regarding to claim 62, the claimed invention is similar to claim 3 and therefore the same rejection applied.

Regarding to claim 63, the claimed invention is similar to claim 4 and therefore the same rejection applied.

Regarding to claim 64, Wagner discloses a computer program product method of auctioning securities comprises instructions to cause a computer to:

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received an order for a security, the order specifying a condition that seeks a specific minimum relative price improvement and an exposure time (see col. 13, line 44-45, col. 16, lines 44-51);

receive a response to the order, the response specifying a price, which can be a relative or fixed price or a contra-side order that may have a condition seeking a relative price improvement, and quantity (see col. 10, lines 19-22, col. 13, lines 44-45); and

match the order with the response in accordance with the exposure time specified by the order (see Fig. 5, item 144, col. 13, line 45).

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3, 21 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner (U.S. Patent 4,903,201) in view of Lupien et al. (hereinafter Lupien) (U.S. Patent No. 5,845,266).

Regarding to claim 3, Wagner discloses the method of claim 1 wherein a plurality of orders and responses are entered, and wherein matching further comprises:

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matching a first one of the orders one of the responses that is determined in accordance with price and quantity specified in accordance with price and quantity specified in the optimal one of responses (see Fig. 5, items 144 and 148, col. 5, 43-46).

Wagner fails to disclose collecting all responses during the exposure interval and match the first one of orders to an optimal one of the responses that is determined in accordance with price and quantity specified in the optimal one of the responses.

However, Lupien discloses collecting all responses during the exposure interval... (see Fig. 11, item 206, 210).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made include Lupien matching feature with Wagner for the benefit of providing faster processing result.

Regarding to claim 21, Wagner discloses the method of claim 14. Wagner fails to disclose the method wherein the process determines whether a match price falls outside of a spread specified for the product.

However, Lupien discloses means for determining whether price falls outside of a spread...(see col. 23, line 59-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Lupien's feature for producing spread information to Wagner's matching result for the market analysis.



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Regarding to claim 50, the claimed invention is similar to claim 3 and therefore the same rejection applied.

6. Claim 23, 42 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner (U.S. Patent 4,903,201) in view of Silverman et al. (hereinafter Silverman) (U.S. Patent No. 5,136,501).

7. Regarding to claim 23, Wagner discloses the method of claim 14. Wagner fails to disclose the method wherein an expired order is sent for a guarantee execution by a market maker or for execution on a market or an exchange.

However, Silverman discloses an expired order is sent for execution on a market (see col. 7, lines 24-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include Silverman's disposal of expired order to include Silverman's feature of sending the order for execution in the market for the meeting the needs of clients.

Regarding to claim 42, Wagner fails to disclose the predefined relative indication allows trading interest to remain anonymous as to price, size and identity until matched with an order.

However, Silverman discloses the predefined relative indication allows trading interest to remain anonymous...(see col. 6, lines 44-47).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Silverman's anonymous matching feature to Wagner's matching feature for the purpose of protecting trader's identity before a match is found.

Regarding to claim 56, Wagner discloses the method of claim 55. Wagner discloses the method wherein the order with the condition is exposed to the market for the exposure time (see col. 13, line 45 and col. 16, lines 44-51);

Wagner fails to disclose the exposure does not reveal the condition.

However, Silverman discloses order with condition is exposed to the market...the exposure does not reveal the condition (see col. 3, lines 39-43 and col. 6, lines 44-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Silverman's anonymous matching feature to Wagner's matching feature for the purpose of protecting trader's identity before a match is found.

### *Conclusion*

8. Claims 1-64 are rejected.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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-Silverman et al. discloses a negotiated matching system includes a plurality of remote terminals associated with respective potential counterparties, a communication network and a matching station.

-Lupien et al. discloses a crossing network that matches buy and sell orders based upon a satisfaction and quantity profile is disclosed.

-Braddock III discloses an automated stock exchange in which a computer matches buy and sell orders for a plurality of stocks.

-Nymeyer discloses a computer matching system in an auction market for fungible goods.

-Matsubara et al. discloses an electronic dealing system which performs matching processing.

-Minton discloses an interactive security trading system.

-Financial Market Trends discloses "a revolution in securities markets structures".

Lee discloses in Dissertation Abstract International, "Intelligent electronic markets for commodity auction: an integrated approach of economic theory and social choice theory".

**10. Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 305-9051, (for formal communications intended for entry)

**Or:**

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(703) 305-0040, (for informal or draft communications, please label "PROPOSED" or "DRAFT")


Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran, whose telephone number is (703) 305-8967 and whose e-mail address is Tongoc.Tran@uspto.gov. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Voeltz, can be reached at (703) 305-9714. The fax phone number for this Art Unit is (703) 305-0040.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

TT  
9Jun00

  
EMANUEL TODD VOELTZ  
SUPERVISORY PATENT EXAMINER  
GROUP 2700